Bioenergy – the renewable fuel

Bioenergy and biofuels could provide the just transition from dependence on fossil fuels

Economic growth and employment built on New Zealand's capability and expertise in forestry, wood processing and bioenergy production from waste - leading to new business opportunities which by 2050 could more than double biomass energy supply up to 27% of the country's energy needs, with a consequential 15% reduction in greenhouse gas emissions*.[* compared to 2017]



Achieved by:

Paradigm shift in thinking about maximising value from processing of wood and waste

Looking for the opportunities arising from climate change

Government providing leadership and assistance to overcome market barriers.

Greenhouse gas emission reduction by 2050 below 2017 levels (kt CO₂-e pa)

Year	Reduction of use of fossil fuels in process heat ^{1, 5} (kt CO2-e pa)	Methane reduction from waste to energy ² (kt CO2-e pa)	Emissions reduction from use of biofuels in transport (kt CO2-e pa)	Total emissions reductiom (kt CO2-e pa)
2030	700	1450	1500	3650
2040	1500	1640	3500	6640
2050	1800	1811	5000	8611

Energy increase by 2050 above 2017 levels (PJ)

Year	Reduction of use of fossil	Methane reduction from	Replacing fossil fuels by	Total energy increase
	fuels in process heat (PJ)	waste to energy (PJ)	biofuels in transport (PJ)	(PJ)
2030	8	3.2	20	31.2
2040	17	3.9	48	68.9
2050	20	4.6	68	92.6